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ABSTRACT

The literature on organizational climate is reviewed, with particular emphasis on associated conceptual issues. The first section of the paper presents an overview of research that has assessed the ability to explain organizational behavior on the basis of perceived climate. The second section focuses on five major conceptual issues that consistently appear in the literature. The third section deals with the empirical relationships between organizational climate and organizational behavior. The utility of one component of organizational climate, communications, is also briefly examined. (Author/AA)

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ORGANIZATIONAL CLIMATE

A REVIEW OF RECENT LITERATURE

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ORGANIZATIONAL CLIMATE:
A REVIEW OF RECENT LITERATURE

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This review represents a summary of the literature on organizational climate. Particular emphasis is placed upon conceputual issues associated with organizational climate. The first section of the paper concerns an overview of research that has assessed the ability of perceived climate to explain organizational behavior. The second section focuses on five major conceptual issues that consistently appear throughout the literature. The third section deals with the empirical relationships between organizational climate and organizational behavior. The utility of one component of organizational climate, communications, is also briefly examined in this section.

I. An Overview of Organizational Climate

Forehand and Gilmer (1964) define organizational climate as "the set of characteristics that describe an organization and that: (a) distinguish the organization from other organizations, (b) are relatively enduring over time, and (c) influence the behavior of people in the organization " (p.362). They discuss how the concept has been measured, its relationship to organizational behavior, and propose a taxonomy of climate dimensions. Each of these topics is discussed in this overview section.

There are a number of different ways to measure organizational climate. Approaches include field studies, measurement of objective organizational indices (e.g., size, degree of hierarchy), and experimental manipulation of climate

components such as leadership style and communications flow. Most researchers, however, focus on a perceptual approach to the measurement of climate. This approach measures climate indirectly via descriptions by organizational members of various organizational characteristics. Causal variables (structure, supervisory practices, etc.), it is hypothesized, interact with personality to produce these perceptions. Generally, respondents complete standardized questionnaires which ask about perceptions of the total organization, supervisory and peer leadership, and interpersonal processes (such as communications flow and communication networks) within work groups. Typical questionnaires that illustrate this approach include the Group Dimensions Descriptive Questionnaire (Hemphill and Westie, 1950), the Organizational Climate Measure (Litwin and Stringer, 1968), the Agency Climate Questionnaire (Schneider and Bartlett, 1968), the Business Organization Climate Index (Payne and Pheysey, 1971), the Survey of Organizations (Taylor and Bowers, 1972), and the Organizational Description Questionnaire (House and Rizzo, 1972).[1] Campbell, et al. (1974) and Hellriegel and Slocum (1974) provide a description and analysis of most of these climate questionnaires.

With respect to approaches that have been used to define and measure organizational climate, James and Jones (1974a) describe three commonly used models. The multiple measurement-organizational attribute approach treats climate as synonymous with the organizational condition. Components include organizational context, organizational structure, organizational values and norms, and organizational processes (leadership, rewards, communications). The perceptual measurement-organizational

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[1] It should be noted that the questionnaires listed above focus upon organizational characteristics in the industrial-business arena. Questionnaires or climate research conducted in the educational arena are not reviewed in the present paper.

attribute approach operationalizes climate via individual perceptions of organizational main effects. The perceptual measurement-individual attribute approach views climate as a summary evaluation of events based upon the interaction of actual events and the perception of these events. Climate is conceptualized as an intervening variable and as an individual perception (or attribute). Since the third approach involves individual filtering, processing, and interpretation of situational data and reflects both the objective situation and individual characteristics, James and Jones (1974) call this psychological rather than organizational climate.

Forehand and Gilmer (1964) examine some possible mechanisms by which climate affects organizational behavior. They emphasize that effects may be directive, affecting all organizational members, or interactive, affecting some but not all members. Hellriegel and Slocum (1974) review 31 studies which have used organizational climate as an independent, dependent, or intervening variable. One important distinction they made is between objective measures of climate and perceptual measures. They emphasize that few research studies have been directed to a determination of whether consistent patterns exist among perceptual and objective assessments. Other reviews of the impact of climate upon organizational behavior have been conducted by Campbell et al. (1974) and Payne and Pugh (1976).

Forehand and Gilmer (1964) also examine the possibility of identifying climate dimensions in order to provide a taxonomy of the organizational situation. As later emphasized by Campbell et al. (1970) attempts to derive a taxonomy of relevant organizational variables have generally focused upon perceptual measures with little attention being given to structural or objective situational characteristics. Hellriegel and Slocum (1974) also note that there has been an

overemphasis upon people-oriented scales with less consideration being focused upon task, structure, or technology dimensions. Various organizational taxonomies have been proposed by Campbell et al.(1970), Pritchard and Karasick (1973), James and Jones (1974b), and Campbell et al.(1974).

A number of other reviews have focused on the distinction between job satisfaction and organizational climate (e.g., Schneider, 1975) or have further differentiated objective from subjective assessments and the relationship between these two methodologies (e.g., Payne and Pugh, 1976). These reviews reveal that some consistent questions are being raised with respect to the utility of the climate construct in understanding organizational behavior. These issues are identified in the next section of this paper.

II. Conceptual Issues

At least five conceptual issues consistently appear throughout the literature: (a) the validity of the interactionist approach which posits that organizational behavior is a joint function of individual and situational factors, (b) the argument that climate is redundant with measures of job satisfaction, (c) the level of analysis question which concerns whether climate scores collected from individuals can be aggregated to explain phenomena at higher organizational levels, (d) the question of the relationship between objective and perceptually defined climate measures, and (e) the identification of meaningful climate taxonomies generalizable both across different levels of the same organization or across different organizations.

A. The Interaction Hypothesis

A number of psychologists have called attention to the importance of the environment in influencing behavior. In 1938, for example, Murray provided a model for the relationship between the individual and his environment in terms of the

environment as it is (alpha press) and as it is perceived by the individual (beta press). More recently, Lichtman and Hunt (1971) distinguish two approaches adopted by social scientists toward understanding the behavior of individuals in organizations: the "personalist" and the "situationalist." Recently, there has been a growing number of scientists who advocate an "interactionist" or integrating approach. The primary orientation of the latter approach is that employee capabilities, needs, preferences, and expectations are not necessarily static in nature, but, instead, may be influenced by organizational experiences. Employee work behavior depends on the nature of the organization, the nature of the job, and the nature of the individual. Although the postulate that behavior is a function of the interaction of the individual and his environment is widely accepted, there have been relatively few attempts still to study behavior as a function of the simultaneous variation of individual and environmental factors.

Bowers (1973) located 11 research studies published since 1959 which evaluated the relative magnitude of personal traits and situational influences on behavior. It was concluded that neither a trait nor a situationalist approach accounted for as much variance as situation times person interactions. Several other studies have demonstrated that situations are as much a function of the person's perceptions and cognitive modifications as the person's behavior is a function of the situation itself (Sells, 1963; Pervin, 1968; Ekehammar, 1974, Insel and Moos, 1974). A number of researchers have emphasized that analysis of variance studies are required in order to isolate the relative importance of these factors. In particular, a comparison of variance components is needed in order to permit a test of the

relative variance due to persons, to situations, and to interactions between persons and situations. Other relevant issues associated with the interactionist approaches concern whether the researcher should focus on the psychological (perceived) or physical (actual) environment as a determinant of organizational behavior and the issue of development of more satisfactory and systematic taxonomies of the environment. Both issues are discussed later in this paper.

With respect to the relative importance of situations and personal traits upon organizational behavior, Schneider (1975) has proposed that the formulation--performance equals ability times motivation--does not receive strong support. The alternative formulation Schneider advocates is that performance equals ability and a climate which stresses the display of individual differences. Perceptions of organizational climate may moderate predictor-criterion relationships. When situational conditions do not exist or are not perceived to exist, the validity of ability tests or motivational variables, for example, is seriously attenuated. Empirical support for this formulation is presented by Herman (1973), Dachler and Mobley (1973), Dachler (1974), James et al. (1974c), and Howard (1976). These studies have shown that significant relationships between job attitudes (e.g., expectancies, instrumentalities) and employee behavior occur only in situations where job behaviors are primarily employee-controlled or where organizational conditions provide contingencies that allow for accurate perceptions about the consequences of alternative performance levels.

A number of studies have tested the proposition that organizational climate acts as a moderator variable and interacts with individual personality to influence both job satisfaction and job performance (Friedlander and Margulies, 1969; George and Bishop, 1971; Campbell and Beaty, 1971;

Schneider, 1972; Pritchard and Karasick, 1973; James and Jones, 1974b; Gavin, 1975; Gavin and Howe, 1975; Downey, Helriegel, and Slocum, 1975). Most of these studies have attempted to demonstrate that performance and satisfaction are a function of the match or fit between individual and environmental characteristics. For each employee, then, there are work environments which more or less match personality characteristics; when congruence exists, higher expressed job satisfaction and/or performance is obtained.

In general, the research evidence supports the interaction hypothesis. A number of studies, however, have only provided equivocal support (e.g., Gavin and Howe, 1975). Several questions, however, need to be answered before it can be concluded that behavior represents some form of mediated transaction between the person and the perceived environment. First, if behavior is to be represented as a multidimensional interaction of person and environmental variables, there is an obvious need for a satisfactory taxonomy of environmental dimensions. Research in this area has been plagued by a lack of standardization of climate questionnaires. Secondly, it is necessary to employ analysis of variance models to determine the degree to which organizational outcomes are related to the interaction of persons and environments, to the person alone, or to perceptions of organizational climate alone. Finally, there appears to be some confusion regarding possible mechanisms by which climate might affect behavior. The effects of different climate dimensions may be directive, affecting all organizational members in the same manner, or interactive, affecting some but not all members. Thus far, it has proven difficult to reliably assess the contribution of specific climate dimensions and interaction effects with personality variables to the relationship with outcome measures.

B. The Redundancy Question

Guion (1973) concludes that there is confusion over the issue of whether perceived measures of climate refer to organizational or individual attributes. If climate refers to the organization, measures of perceived organizational climate should be evaluated in terms of the accuracy of these perceptions. This could be accomplished by using outside consultants' agreement on "reality" as a criterion against which to compare employees' perceptions. If, on the other hand, climate refers to the individual, then perceived organizational climate may simply be another name for job satisfaction. This may largely be because most measures of perceived climate have borrowed heavily from job satisfaction questionnaires.

Schneider (1975) distinguishes job satisfaction and organizational climate on the basis of three considerations: (a) the level of abstraction (micro versus macro); (b) the level of affect (descriptive versus evaluative), and (c) the level of analysis (individual versus organizational). Organizational climate is conceptualized as a macro, descriptive, and organizationally oriented variable. Schneider argues that climate represents what is "out there" while job satisfaction connotes some internal state of the perceiver.

Johannesson (1973) provides some support for a redundancy argument. Two measures of job satisfaction and one measure of organizational climate were administered to employees of a manufacturing corporation. The results of a cluster analysis yielded five dimensions, indicating that climate failed to add any new or different variance to commonly identified satisfaction factors. Three of the five clusters contained items from both satisfaction and climate questionnaires. Payne (1974) and Schneider (1973), however, have questioned these redundancy conclusions.

LaFollette and Sims (1975) conducted a replication of the Johannesson (1973) study. This study, conducted in a major medical complex, used a measure of satisfaction, a measure of organizational climate, and a measure of organizational practices derived from House and Rizzo (1972). Results indicated very significant intercorrelations among these questionnaires. Although LaFollette and Sims (1975) argue that climate assesses work environment properties, while satisfaction assesses affective responses to facets of the work environment and that they relate to performance in a different manner, their study does not present a compelling case for the independence of the two concepts.

Although there are conceptual reasons to expect job satisfaction to be the result of climate perceptions (e.g. Taylor and Bowers, 1972; LaFollette and Sims, 1975; Litwin and Stringer, 1968), empirical tests of their independence have been equivocal. Different conclusions may be the result of techniques used (correlational versus cluster analysis) and/or to sample heterogeneity. It also appears necessary that a wider range of climate measures be utilized before any firm conclusions regarding climate-satisfaction redundancy can be drawn.

Schneider and Snyder (1975) also make a logical distinction between organizational climate and job satisfaction. Climate is again conceptualized as organizational-descriptive in orientation, while job satisfaction is conceptualized as individual-evaluative. There should be no necessary correlation between climate and satisfaction measures--a description should not necessarily relate to an evaluation. It was hypothesized that individuals should agree more on climate descriptions than on feelings of satisfaction and that the two concepts relate differently to outcome measures. In a study of these relationships, Schneider and Snyder (1975) demonstrated that individuals across organizations did agree more on climate

perceptions than on job satisfaction. With respect to predicting organizational behavior, however, neither construct was particularly effective. Payne, Fineman, and Wall (1976) have also emphasized the conceptual differences between job satisfaction and organizational climate.

If climate represents what is "out there" and satisfaction connotes some internal state, the reliability (consensus) of what is "out there" becomes a crucial issue. One would anticipate that climate dimensions would be perceived comparably by most members of an organization. Schneider and Bartlett (1970) tested the extent to which individuals at different levels agreed upon evaluations of organizational dimensions (inter-level reliability), and the extent to which individuals at a given level agreed (intra-level reliability). It was found that intra-level reliability was quite low (average correlations were approximately .20) and that inter-level reliability was even lower.

A number of studies have indicated that organizational climate perceptions vary on the basis of age, sex, tenure in the organization, education, job type, job level, and the like (Graham, 1969; Schneider, 1972; McCarrey and Edwards, 1973; Payne and Mansfield, 1973; Johnston, 1976; Gavin and Greenhaus, 1976).

With respect to a summary statement regarding the issue of redundancy, it appears climate measures behave like satisfaction measures in that they are poorly related to performance but are moderately related to satisfaction, turnover, and absenteeism. Although it is possible to conceptually discriminate the two constructs (evaluative versus descriptive, individual versus organizational), empirical tests of this distinction have not always been powerful enough to rebut the redundancy argument. Since climate measures are perceptual in nature and are therefore partially a function of individual differences (both in terms of personal characteristics and the effects of organizational characteristics), consensus within organizational subgroups is not always high. As a result of a confounding of individual and organization-

al characteristics, the accuracy of accumulated climate scores also becomes suspect. If accuracy and consensus cannot be demonstrated, job satisfaction and organizational climate may indeed be tautological.

C. The Level of Analysis Question

With respect to the level of analysis versus the level of explanation, James and Jones (1974b) state that there may be a problem in using data collected at one organizational level to explain phenomena in another (higher or lower) level in the organization. They question whether psychological climate measured at the individual level can be accumulated or averaged to provide an overall measure of total organizational climate. Aggregation may be difficult because of a lack of agreement (consensus) within an organization. Lack of consensus may result from the fact that some groups within an organization do, in fact, have objectively different climates (e.g., a total organization may be highly formalized, while a workgroup may be quite informal), or from the fact that climate, which represents a perceptual phenomenon, can be influenced both by individual characteristics and objective situational characteristics.

Payne and Mansfield (1973) suggest that organizational (psychological) climate provides a conceptual linkage between analysis at the organizational level and analysis at the individual level. Sarup (1975) also points out that attempts to apply a higher level of analysis to phenomena at a lower level of organization or attempts to explain sociocultural phenomena in terms of data and theories about the functioning of individuals are difficult to conduct. Such attempts require the introduction of other psychological mechanisms or intervening variables (generally perceived characteristics) which process or mediate the impact of a structural factor.

Since a number of structural or contextual factors such as organization-

al size may influence perceptions of organizational climate, Payne and Mansfield (1973) also caution against using mean scores to describe an organization. Organizational subgroups which may have different climate perceptions require that hypotheses be generated separately for each subgroup before relationships with other variables can be ascertained. When measures of perceived climate are averaged and where consensus or accuracy against objective organizational characteristics cannot be demonstrated, averaging climate scores is a questionable procedure. If there are multiple perceived climates, an average score would reflect a score that may not exist in any of the subgroups or organizational levels.

Gavin and Howe (1975) argue that psychological climate becomes organizational climate only when there is significant consensus among organizational members. Howe (1976) emphasizes that perceptions of organizational characteristics are contaminated by individual and subgroup perceptions and prefers to conceptualize climate as a group, rather than as an organizational attribute.

Both Schneider and Bartlett (1970) and Payne (1974) question the amount of agreement that groups of individuals have of organizational climate. When the individual is taken as the unit of analysis, the relationship between climate and organizational effectiveness or between climate and satisfaction are very different from those at the organizational level of analysis. Payne (1974) feels that it is necessary to partial out for the relationship at the aggregated level before assuming that relationships at this level contain something unique. Bachman, Smith, and Slesinger (1966) also distinguish between office-level and individual-level effects. Results of their study showed strong differences between grouped and individual data, with aggregated correlations being considerably higher than individual-level

correlations. Partialing individual perceptions also considerably reduced correlations between organizational characteristics and outcome measures.

In short, the level of analysis question continues to present a problem, and it appears necessary to use both individual and group level data to study the impact of organizations upon their members.

D. Objective Versus Perceptual Measures of Climate

Payne and Pugh (1976) differentiated between objective climate assessments (direct measures of organizational properties such as size, structure, levels of authority, technology etc.) and subjective climate assessments (indirect measures of organizational properties using group-based questionnaires). Their review indicated that the relationships between perceptual and objective approaches were not strong. Hellriegel and Slocum (1974) found relatively few research studies that were directed at a determination of whether consistent patterns exist among perceptually and objectively determined climate measures. Campbell et al.(1970), Payne et al.(1971), Payne and Mansfield (1973), James and Jones (1974a), and Lawler, Hall and Oldham (1974) have also reported relatively low relationships between perceptual and objective climate measures. On the other hand, a number of studies have indicated that objective organizational characteristics may directly impact organizational behavior (Dunteman, 1966; Inkson et al., 1967; Pugh et al., 1969; Prien and Ronan, 1971; Pheysey et al.,1971; Ivancevich and Donnelly, 1975).

Proponents of an objective approach to describing an organization argue that these measures, based upon formal organizational properties, are unlikely to be distorted by reactivity and often disclose closer relationships between organizational structure or climate and individual and/or group performance. Proponents of a perceptual approach argue that the objective environment influences behavior only via the psychological environment which, in turn, is

moderated by personal attributes.

Jessor and Jessor (1973) hypothesize that relationships between objective and perceptual measures may not be high because certain environmental cues are conceptully more remote from experience and from behavior than other cues. Distal cues require complex intervening conceptual linkages before their experiential significance can be determined. Lawler, Hall, and Oldham (1974) find that organizational structure has been studied mainly as it directly related to job attributes and behavior, rather than to its impact upon organizational climate. Climate has rarely been studied as a possible intervening variable between structural characteristics and outcome measures. It is rather interesting to note that they concluded perceptions of organizational climate were more strongly related to behavioral and attitudinal outcomes than were objective environmental characteristics such as span of control, organizational shape, organizational size, or number of hierarchical levels.

A number of literature reviews have summarized the direct effects of organizational structure characteristics upon the attitudes and behavior of employees (Porter and Lawler, 1965; Campbell et al., 1974; James and Jones, 1976). It appears that organizational level and subunit size have the strongest relationship to dependent variables, with the impact being clearer on attitudinal than on behaviorial criteria.

Herman and Hulin (1972) demonstrate that substantial relationships often exist between objective organizational structure characteristics and job attitudes. Of more interest is their focus on the simultaneous and relative influence of personal versus structural characteristics upon organizational behavior. Both Herman and Hulin (1972) and Newman (1975) conclude that perceptions of organizational climate and job attitudes are related more to

the employees' location in the organization than to their personal characteristics.

The central issue of this section concerned the relationship between objectively and perceptually measured assessments of organizational climate. While this relationship has not been extensively researched, there is a moderate amount of data that indicate objective organizational characteristics sometimes act as a main effect upon organizational behavior. To some degree, however, this effect may be moderated or mediated by employee climate perceptions. Additionally, a number of studies have used structural factors as independent variables and climate perceptions as dependent variables. Although the agreement between objective and perceptual measures has yet to be conclusively demonstrated, it is important to recognize that an understanding of organizational behavior requires that both types of variables be included in a multivariate, comprehensive theory of organizational behavior.

E. Identification of Climate Dimensions

It is widely recognized that organizational climate dimensions should be descriptive and organizationally-oriented rather than evaluative or individually-oriented. It is also recognized that climate dimensions should permit relatively homogeneous descriptions within an organization, but allow the researcher to describe the characteristics of different organizational entities. The basic question, however, concerns which dimension or items a researcher should employ in discriptions of organizational behavior.

Sells (1963) has argued that measurement of environmental factors should be based on objective observation of the situation external to and independent of the individual's perceptions. Regardless or the approach, subjective or objective, a taxonomic system of environmental dimensions is required if behavior is to be represented as a multidimensional interaction of person and

environmental variables. The development of a taxonomy of organizational climate is often accomplished by using factor analytic procedures designed to define relatively independent and permanent characteristics.

Campbell et al. (1970) present a taxonomy of four climate factors: individual autonomy, degree of structure imposed upon the position, reward orientation, and consideration, warmth, and support. This taxonomy was later expanded to include a number of additional dimensions (Campbell et al., 1974).

Based upon factor analysis, James and Jones (1976b) identified four components of psychological climate: job characteristics such as variety, and challenge, leadership characteristics and behavior such as support and goal emphasis, workgroup characteristics such as cooperation and espirit, and organizational characteristics such as fairness of the reward system. Jones and James (in press) report that most of these components which were derived on Navy samples were similar across two different organizations (municipal fire departments and a private health care program).

A number of other taxonomies have been proposed (Halpin and Croft, 1962; Schneider and Bartlett, 1970; Taylor and Bowers, 1972). Most of these taxonomies, however, tend to overemphasize people-oriented scales with less consideration being focused upon task, structure, or technology dimensions.

Waters, Roach, and Batlis (1974) attempted to identify climate dimensions and to relate these dimensions to indices of employee attitudes and behaviors. Twenty-two perceptually-based organizational climate scales from three widely used questionnaires were administered to a sample of employees. Five factors accounted for most of the variance. These factors were identified as effective organizational structure, work autonomy, close impersonal supervision, open challenging environment, and employee-

centered orientation. The overlap between these factors and those identified by Campbell et al. (1970) is readily apparent.

The study by Waters, Roach, and Batlis (1974) and the reviews by Campbell et al. (1970) and Campbell et al. (1974) represent particularly useful attempts to arrive at a taxonomy of climate dimensions. Proliferation either of climate questionnaires or climate scales does not appear to be particularly useful strategy, especially in the absence of a conceptual framework designed to guide research efforts and the need to separate the climate construct from job satisfaction measures.

III. Validity Studies

A number of studies have examined the relationship between organizational climate and individual or organizational performance measures. Table 1 presents a brief description of studies where climate served as an independent variable in attempts to predict organizational behavior.

Several reviews of the literature have assessed the impact of climate perceptions upon job satisfaction and job performance. Campbell et al. (1974) conclude that climate is related to job performance but that correlations are generally in the .20 range. On the other hand, climate is consistently related to job satisfaction (including turnover and absenteeism). Hellriegel and Slocum (1974) also conclude that the evidence supporting a relationship between organizational climate and job performance is not particularly persuasive. Inconsistent findings, however, may have been the result of utilization of different climate questionnaires either in terms of specific scales used or in terms of methodologies (objective versus perceptual), and the lack of congruency between patterns of contingency variables (e.g., organic versus mechanistic organizational structure, level of technology, etc.)

TABLE 1

Researchers	Climate Instrument	Sample	Dependent Variable	Results
Downey, Hellriegel, and Slocum (1975)	Six factor analyzed scales (e.g., decision making, warmth, risk, rewards)	Managers (N=92)	Job satisfaction; job performance	Organizational climate interacted with individual personality in influencing job satisfaction and performance. Significant interactions reported for two of six climate factors.
Farris (1969)	Six organizational factors (e.g., involvement in technical work, diversity of task activities)	Engineers (N=151)	Output (e.g., number of patents technical reports supervisory ratings.	Low but statistically significant correlations between organizational factors and performance. Relationships consistently stronger when performance was measured before organizational factors.
Frederickson (1966)	Manipulations of climate conditions	Managers (N=260)	Job satisfaction; job performance	Inovative climates yielded higher and more predictable productivity. Consistent climates yielded more predictable productivity. Work methods depended upon climate perceptions.
Friedlander and Margulies (1969)	Halpin and Croft's OCDQ	Production Workers (N=95)	Job satisfaction	Organizational climate affected satisfaction as moderated by work values. Relationships varied by type of climate and job satisfaction measure.
Friedlander and Greenberg (1971)	Supportiveness of climate (new worker treatment, peer and supervisor support)	Hard core unemployed (N=478)	Job retention; work effectiveness; work behavior	Job performance and retention unrelated to attitudes, work motivation, previous work history, and biographical data. Sole correlate of work effectiveness and behavior was the degree of supportiveness perceived by workers.
Gavin and Howe (1975)	Psychological climate (e.g., structure, hindrance, rewards, challenge)	Five firms-managerial level employees (N=1039)	General satisfaction; self-reported performance and expectancies, supervisory performance evaluations	Significant relationships between climate and expectancies; and job satisfaction (mdn r=.25). No significant relationships with self-reported performance. Only three of 16 correlations with supervisory evaluations significant. Mixed results found for climate as a moderator between motivation and outcome variables
Gavin (1975)	Work environment perceptions (e.g., structure, hindrance, rewards, challenge)	Domestic airline employees in both line (N=257) and staff jobs (N=214)	Mental health (e.g., interpersonal relations, job satisfaction); supervisory evaluations	Significant relationship between perceived work environment and measures of employee mental health criteria. Forty-four percent of climate-supervisory evaluation corelations were signicant beyond the .05 level.
Gavin and Greenhaus (1976)	Work environment perceptions (e.g., structure, hindrance, rewards, challenge)	Domestic airline employees in both line (N=257) and staff jobs (N=214)	Mental health (e.g., interpersonal relations, job satisfaction); supervisory evaluation	Organizational tenure moderated the relationship between work environment perceptions and outcome criteria only in the line of organization.
Jones and James (1974)	Psychological climate (e.g., conflict and ambiguity, job challege, workgroup cooperation)	Navy enlisted personnel (N=4315) assigned to 20 ships	Individual level criteria (intention to reenlist, promotion rate, overall job satisfaction)	Psychological climate correlated with intent to reenlist (r=.56), with promotion rate (r=.26), and satisfaction (r=.69).
Jones and James (in press)	Psychological climate (e.g., conflict and ambiguity, job challenge, workgroup cooperation)	Navy enlisted personnel (N=4315) assigned to 20 ships	Ship division level criteria (composite criterion for two subsamples)	Climate clusters correlated .41 and .39 with a composite criteria for two subsamples.

TABLE 1 (continued)

Researchers	Climate Instrument	Sample	Dependent Variable	Results
Kaczka and Kirk (1968)	Dimensions of managerial climate (e.g., leadership style, cost emphasis)	Computer simulation	Performance of a model firm (e.g., profits, sales, group cohesion)	Performance was affected by organizational climate. In most cases, employee-centered climate yielded higher performance.
LaFollette and Sims (1975)	Litwin and Stringer's climate questionnaire and House and Rizzo's Organizational Practices Questionnaire (OPQ)	Medical Complex (N=997)	Job satisfaction; supervisory ratings of job performance	Significant relationship between climate and satisfaction scores. Relationships with performance ranged from .09 to .24 (mdn $\underline{r}$=.10). Argument made that satisfaction and climate relate differently to performance.
Lawler, Hall, and Oldham (1974)	Bipolar adjective scales	Scientists in 21 R&D organizations (N=291)	Job satisfaction; rated technical performance, administrative performance, and overall job performance	Median correlation of .25 between climate and job performance. Median correlation of .47 between climate and satisfaction.
Litwin and Stringer (1968)	Manipulations of climate conditions (authoritarian, democratic, achieving)	Experimental subjects (N=45)	Job satisfaction; job performance	Different styles of leadership created different climates and effects upon outcome measures. Achieving climate, for example, aroused achievement motivations and led to higher satisfaction and performance.
Lyon and Ivancevich (1974)	Halpin and Croft's OCDQ	Nurses (N=35); administrative personnel (N=199)	Job satisfaction	Climate dimensions were found to influence individual job satisfaction. Climate perceptions differed for nurses and administrators.
McCarrey and Edwards (1973)	198-item questionnaire covering job satisfaction, supervisory style, situational variables, etc.	Biological scientists (N=72)	Nine performance scores (peer and departmental levels); citation rate, etc.	Perceived climate of higher achieving scientists differed from that of lower achieving scientists.
Pritchard and Karasick (1973)	Campbell and Pritchard questionnaire (e.g., autonomy, structure, rewards, supportiveness)	Managers (N=76)	Job satisfaction; job performance ratings	Climate strongly related to satisfaction (mdn $\underline{r}$=.50). Only two of 11 climate dimensions related to performance. Regardless of individual personality characteristics (EPPS), highly supportive climates were associated with higher job satisfaction.
Schneider and Hall (1972)	Work climate (e.g., supervision effectiveness, work challenge, personal acceptance, autonomy)	Parish priests (N=373)	Job satisfaction	Moderately strong relationship between work climate and satisfaction.
Schneider and Snyder (1975)	Agency climate questionnaire	50 life insurance agencies (N=522)	Need satisfaction; job satisfaction; performance indices of agency effectiveness, and turnover	Employees agreed more on climate perceptions than on job satisfaction; satisfaction more strongly related to turnover than climate. Neither satisfaction or climate were strongly related to performance data.
Schneider (1975)	Agency climate questionnaire	Life insurance agents (N=914)	Tenure; sales	Type of organization affected the relationship between the fit of new agent climate expectations/ preferences to the agency or new agent success.
Waters, Roach, and Batlis (1974)	Selected scales from Halpin and Croft's OCDQ, Litwin and Stringer's scale, and House and Rizzo's OPQ	Employees in seven radio and TV stations (N=105)	Job satisfaction; self-reported effort and performance	None of the climate factor dimensions and very few of the 22 climate scales were related to self-ratings. Results may have been influenced by dependent variable ceiling effects.

across the various organizations studied. Additionally, some of the confusion regarding climate-performance relationships may be due to the fact that organizational climate sometimes acts as a main effect and sometimes as a moderator, wherein different climate dimensions interact with different individual and situational characteristics.

Since correlations between organizational climate and performance are generally around .20 to .30, it is emphasized that climate perceptions should be combined with organizational context, structure, process, and individual characteristics in order to maximize correlations with organizational behavior. As reported by Jones and James (1974b), predictive validity coefficients are generally in the .40's or .50's when such a comprehensive-integrative model is employed to predict organizational criteria.

A large number of studies have related personal aptitudes, demographic characteristics, expectations, and the like to indices of organizational behavior. Another large group of studies have related situational, structural, and job-related characteristics to behavior. Organizational research must encompass both individual and situational differences as antecedent causes of organizational behavior. A focus on either a "personalist" model or some variation of "situationalist" models does not account for more than a moderate amount of behavioral variance. These models should be replaced by focus upon models emphasizing that behavior in organizations is the result of a dynamic interaction between the organizational situation and the characteristics of individuals in those situations. This approach requires investigation of the simultaneous relationships of personal, task, structural, and perceived organizational climate variables upon each other and subsequently upon outcome measures. (See Figure 1).

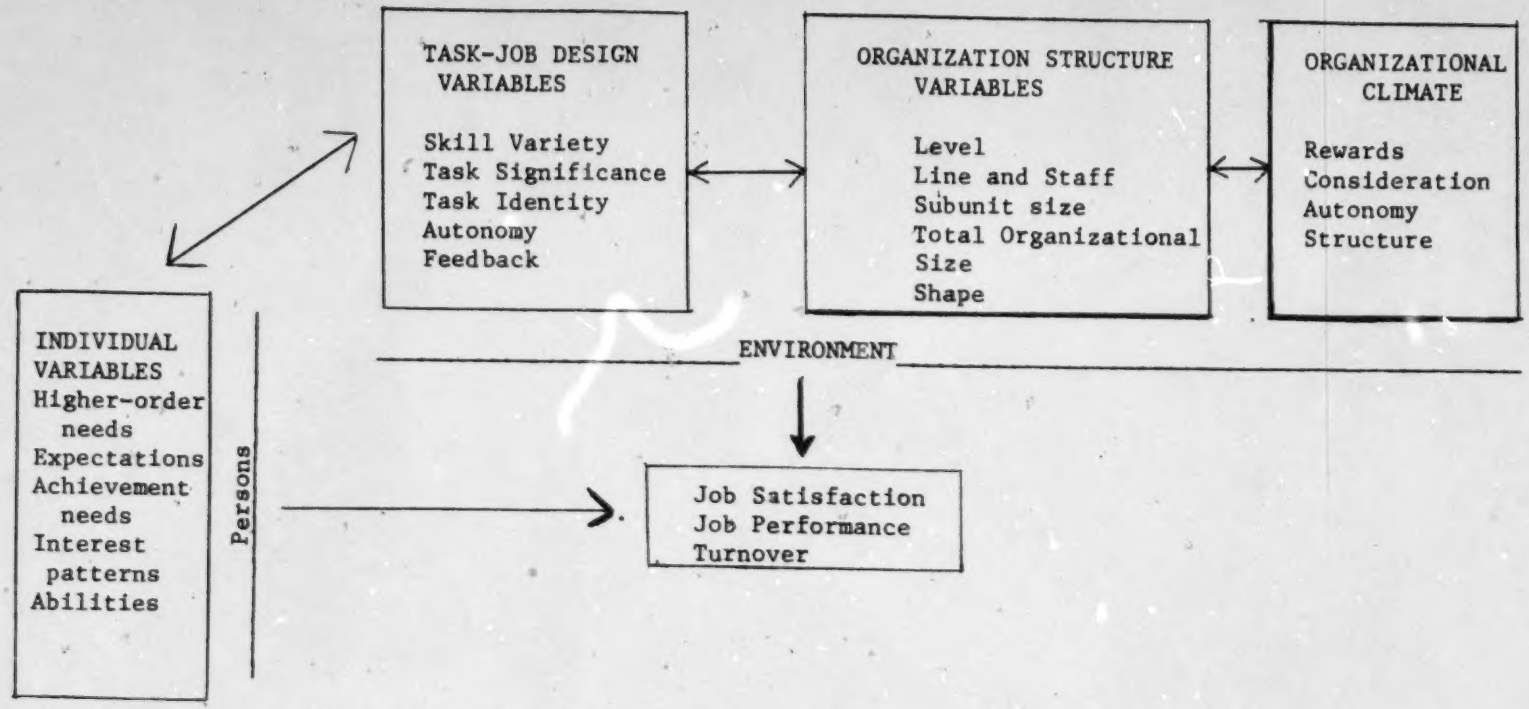

Figure 1. Principal Classes of Variables Correlated with Job Satisfaction, Job Performance, and Turnover.

With respect to the validity of items measuring communications as one component of climate, a few predictive studies conducted among Navy personnel are pertinent. Specific items used in a survey of organizational climate were: (a) "Is the amount of information you get about what is going on in other departments or watch stations adequate to meet your needs?" (b) "To what extent are you told what you need to know to do your job in the best possible way?" and (c) "How receptive are those above you to your ideas and suggestions?".

Crawford and Thomas (1975) report a correlation of .47 between items assessing quality of communications and non-judicial punishment rates (minor infractions of a disciplinary nature). Mumford (1976) reports a condition of .41 between communications and ship refresher training scores. Finally, Kieckhaefer (in press) reports correlations ranging from .58 to .64 between these items and a variety of recruit company criteria. Although correlations are based upon aggregated data with ships or recruit companies serving as the unit of analysis, they clearly indicate that the quality of communications within an organization represents one important component of organizational climate questionnaires.

Summary and Conclusions

It is evident from this review that a number of unresolved methodological and conceptual issues characterize the utilization of organizational climate measures. Perceptual climate assessments often confound individual and organizational attributes. Although both perceptual and objective approaches are called for, an integrated approach is generally not utilized. When objective and perceptual relationships are ascertained they are generally quite low. There exists the requirement that climate should be measured by a variety of different methodologies, including experimental manipulation, in order to determine if congruence exists across measurement approaches.

It remains to be established that climate strongly and consistently affects behavior in organizations. Correlations between climate and performance are generally quite low unless individual differences and/or task characteristics are assessed and used as moderator variables. Although climate perceptions should be combined with structural, process, and individual difference variables to maximize correlations with effectiveness criteria, it remains difficult to posit cause-effect relationships among causal, intervening, and outcome variables.

A taxonomy should be developed not only of structural and organizational context factors but also of psychological constructs relating to organizational climate. In assessing organizational climate, for example, should one use dimensions of hindrance, espirit, structure, autonomy or some entirely different set of psychological dimensions?

There also exists the need to isolate across and within group variability with respect to climate dimensions and the effect of individual differences, hierarchical job level, and task responsibilities upon these perceptions.

References

Bachman, J. G., Smith, C. G. & Slesinger, J. A. Control, performance and satisfaction: An analysis of structural and individual effects. Journal of Personality and Social Psychology, 1966, 4, 127-136.

Bowers, K. S. Situationism in psychology: An analysis and a critique Psychological Review, 1973, 80, 307-336.

Campbell, J. P., Dunnette, M. D., Lawler, E. E., III, & Weick, K. E., Jr. Managerial behavior, performance, and effectiveness. New York: McGraw-Hill, 1970.

Campbell, J. P., & Beaty, E. E., Organizational climate: its measurement and relationship to work group performance. Paper presented at the American Psychological Association, Washington, D. C., September, 1971.

Campbell, J. P., Bownas, D. A., Peterson, N. G., & Dunnette, M. D. The measurement of organizational effectiveness: A review of relevant research and opinion (Technical Report 75-1). San Diego: Naval Personnel Research & Development Center, 1974.

Crawford, K. S., & Thomas, E. D. Human Resources Management and Non-Judicial Punishment Rates on Navy Ships. San Diego: Navy Personnel Research and Development Center, August 1975. (TR 76-5).

Dachler, H. P., & Mobley, W. H. Construct validation of an instrumentality-expectancy-task goal model of work motivation: Some theoretical boundary conditions. Journal of Applied Psychology Monograph, 1973, 58, 397-418.

Dachler, H. P., Work motivation and the concept of organizational climate. (Research Report No. 7) University of Maryland, 1974.

Downey, H. K., Hellriegel, D., & Slocum, J. W. Congruence between individual needs, organizational climate, job satisfaction, and performance. Academy of Management Journal, 1975, 18, 149-155.

Dunteman, G. H. Organizational conditions and behavior in 234 industrial manufacturing organizations. Journal of Applied Psychology, 1966, 50, 300-305.

Farris, G. F. Organizational factors and individual performance: A longitudinal study. Journal of Applied Psychology, 1969, 53, 87-92.

Ekehammar, B. Interactionism in personality from a historical perspective. Psychological Bulletin, 1974, 81, 1026-1048.

Forehand, G. A., & Gilmer, B. Environmental variation in studies of organizational behavior, Psychological Bulletin, 1964, 62, 361-382.

Frederiksen, N. Some effects of organizational climates on administrative performance. Research Memorandum RM-66-21, Educational Testing Service, 1966.

Friedlander, F., & Margulies, N. Multiple impacts of organizational climate and individual value systems upon job satisfaction. Personnel Psychology, 1969, 22, 171-183.

Friedlander, F., & Greenberg, S. Effect of job attitudes, training, and organizational climate on performance of the hard-core unemployed. Journal of Applied Psychology, 1971, 55, 287-295.

Gavin, J. F. Organizational climate as a function of personal and organizational variables. Journal of Applied Psychology, 1975, 60, 135-139.

Gavin, J. F., & Howe, J. G., Psychological climate: Some theoretical and empirical considerations. Behavioral Science, 1975, 20, 228-240.

Gavin, J. F., Employee perceptions of the work environment and mental health: A suggestive study. Journal of Vocational Behavior, 1975, 6, 217-234.

Gavin, J. F., & Greenhaus, J. H., Organizational tenure, work environment & perceptions. Behavioral Science, 1975, 20, 228-240.

George, J. R., & Bishop, L. K., Relationship of organizational structure and teacher personality characteristics to organizational climate. Administrative Science Quarterly, 1971, 16, 467-475.

Guion, R. M. A note on organizational climate. Organizational Behavior and Human Performance, 1973, 9, 120-125.

Graham, W. K. Comparison of job attitude components across three organizational levels. Personnel Psychology, 1969, 22, 33-40.

Halpin, A. W., & Croft, D. B. The Organizational climate of schools. Mimeographed report, June 1962.

Hellriegel, D., & Slocum, J. W., Jr. Organizational climate: Measures, research, and contingencies. Academy of Management Journal, 1974, 17, 255-280.

Hemphill, J. K., & Westie, C. N. The measurement of group dimensions. Journal of Psychology, 1950, 29, 325-342.

Herman, J. B. & Hulin, C. L. Studying organizational attitudes from individual and organizational frames of reference. Organizational Behavior and Human Performance, 1972, 8, 84-108.

Herman, J. B. Are situational contingencies limiting job attitude-job performance relationships? Organizational Behavior in Human Performance, 1973, 10, 208-224.

House, R. J., & Rizzo, J. R. Role conflict and ambiguity as critical variables in a model of organizational behavior. Organizational Behavior and Human Performance, 1972, 7, 467-505.

Howard, A. Intrinsic Motivation and its determinants as factors enhancing the prediction of job performance from ability. (Research Report No. 11) University of Maryland, 1976.

Howe, J. G. Empirical tests of two definitions of formal group climate. Paper presented at the Western Psychological Association, Los Angeles, California, April 1976.

Insel, P. M., & Moos, R. H. Psychological environments: Expanding the scope of human ecology. American Psychologist, 1974, 29, 179-187.

Ivancevich, J. M., & Donnelly, J. H., Jr. Relationship of organizational structure to job satisfaction, anxiety-stress, and performance. Administrative Science Quarterly, 1975, 20, 272-280.

Inkson, K., Payne, R., & Pugh, D. Extending the occupational environment: The measurement of organizations. Occupational Psychology, 1967, 41, 33-47.

James, L. R., & Jones, A. P. Organizational climate: A review of theory and research. Psychological Bulletin, 1974, 81, 1096-1112. (A)

James, L. R., & Jones, A. P. An organizational model: components and measurement. (IBR report no. 74-28). Texas Christian University Institute of Behavioral Research, 1974. (B)

James, L. R., & Jones, A. P., Hartman, E. A., & Stebbins, M. W. An examination of the relationships between psychological climate and a VIE model for work motivation. (IBR report No. 74-29) Texas Christian University Institute of Behavioral Research, 1974 (C).

James, L. R., & Jones, A. P. Organizational structure: A review of structural dimensions and behavior. Organizational Behavior and Human Performance, 1976, 16, 74-113.

Jessor, R., & Jessor, S. L. The perceived environment in behavioral science. American Behavioral Scientist, 1973, 16, 801-828.

Johannesson, R. E. Some problems in the measurement of organizational climate. Organizational Behavior and Human Performance, 1973, 10, 118-144.

Johnston, H. R. A new conceptualization of source of organizational climate. Administrative Science Quarterly, 1976, 21, 95-103.

Kaczka, E. E., & Kirk, R. V. Managerial climate, work groups, and organizational performance. Administrative Science Quarterly, 1968, 12, 252-272.

LaFollette, W. R., & Sims, H. P., Jr. Is satisfaction redundant with organizational climate? Organizational Behavior and Human Performance, 1975, 13, 257-278.

Lawler, E. E., III, Hall, D. T., & Oldham, G. R. Organizational climate: Relationship to organizational structure, process, and performance. Organizational Behavior and Human Performance, 1974, 11, 139-155.

Lichtman, C. M., & Hunt, R. G. Personality and organization theory: A review of some conceptual literature. Psychological Bulletin, 1971, 76, 271-294.

Litwin, G. H., & Stringer, R. Motivation and Organizational Climate. Boston: Harvard University, 1968.

Lyon, H. L., & Ivancevich, J. M. An exploratory investigation of organizational climate and job satisfaction in a hospital. Academy of Management Journal, 1974, 17, 635-648.

McCarrey, M. W., & Edwards, S. A. Organizational climate conditions for effective research scientist role performance. Organizational Behavior and Human Performance, 1973, 9, 439-459.

Mumford, S. J. Human resources management and operational readiness as measured by refresher training on Navy ships, San Diego: Navy Personnel Research and Development Center, February 1976. (TR 76-32).

Newman, J. E. Understanding the organizational structure-job attitude relationship through perceptions of the work environment. Organizational Behavior in Human Performance, 1975, 14, 371-395.

Payne, R. L., & Pheysey, D. C. G. G. Stern's Organizational Climate Index: A reconceptualization and application to business organizations. Organizational Behavior and Human Performance, 1971, 6, 77-98.

Payne, R. L., & Mansfield, R. Relationship of perceptions of organizational climate to organizational structure, context, and hierarchical position. Administrative Science Quarterly, 1973, 18, 515-526.

Payne, R. Prospects for research on organizational climates. In Earl I. Jones (Ed.), Symposium proceedings, occupational research and the Navy Prospectus 1980 (TR 74-14). San Diego: Navy Personnel Research and Development Center, 1974.

Payne, R., & Pugh, D. S. Organizational Structure and Climate. In M. D. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology. Chicago: Rand McNally, 1976.

Payne, R. L., Fineman, S., & Wall, T. D. Organizational climate and job satisfaction: A conceptual synthesis. Organizational Behavior and Human Performance, 1976, 16, 45-62.

Pervin, L. A. Performance and satisfaction as a function of individual-environment fit. Psychological Bulletin, 1968, 69, 56-68.

Pheysey, D. C., Payne, R. L., & Pugh, D. S. Influence of structure of organizational and group levels. Administrative Science Quarterly, 1971, 16, 61-73.

Porter, L. W., & Lawler, E. E., III. Properties of organization structure in relation to job attitudes and job behavior. Psychological Bulletin, 1965, 64, 23-51.

Prien, E. P., & Ronan, W. W. An analysis of organizational characteristics. Organizational Behavior and Human Performance, 1971, 6, 215-234.

Pritchard, R. D., & Karasick, B. W. The effect of organizational climate on managerial job performance and job satisfaction. Organizational Behavior and Human Performance, 1973, 9, 126-146.

Pugh, D. S., Hickson, D. J., Hinings, C. R., & Turner, C. The context of organization structure. Administrative Science Quarterly, 1969, 14, 91-114.

Sarup, G. Levels of analysis in social psychology and related social sciences. Human Relations, 1975, 28, 755-769.

Schneider, B., & Bartlett, C. J. Individual differences and organizational climate: II. Measurement of organizational climate by the multi-trait, multi-rater matrix. Personnel Psychology, 1970, 23, 403-512.

Schneider, B. The perception of organizational climate: The customer's view. Journal of Applied Psychology, 1972, 57, 248-256.

Schneider, B. Organizational climate: Individual preferences and organizational realities revisited. Journal of Applied Psychology, 1975, 60, 459-465.

Schneider, B., and Holl, D. T. Toward specifying the concept of work climate: A study of Roman Catholic diocesan priests. Journal of Applied Psychology, 1972, 56, 447-455.

Schneider, B. Organizational climates: An essay. Personnel Psychology, 1975, 28, 447-479.

Schneider, B., & Snyder, R. A. Some relationships between job satifaction and organizational climate. Journal of Applied Psychology, 1975, 60, 318-328.

Sells, S. B. An interactionist looks at the environment. American Psychologist, 1963, 18, 696-702.

Taylor, J. C., & Bowers, D. F. Survey of Organizations. Ann Arbor, Michigan: Institute for Social Research, 1972.

Waters, L. K., Roach, D., & Batlis, N. Organizational climate dimensions and job-related attitudes. Personnel Psychology, 1974, 27, 465-476.